KENWOOD

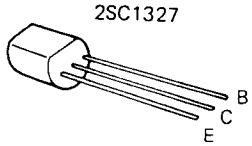
KX-1003

MODEL

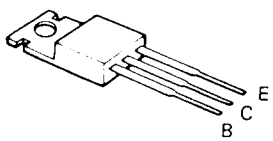
SERVICE MANUAL

KENWOOD

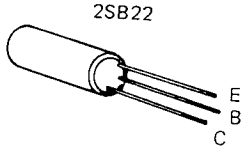
2SA564
2SA721
2SC536
2SC828
2SC1327



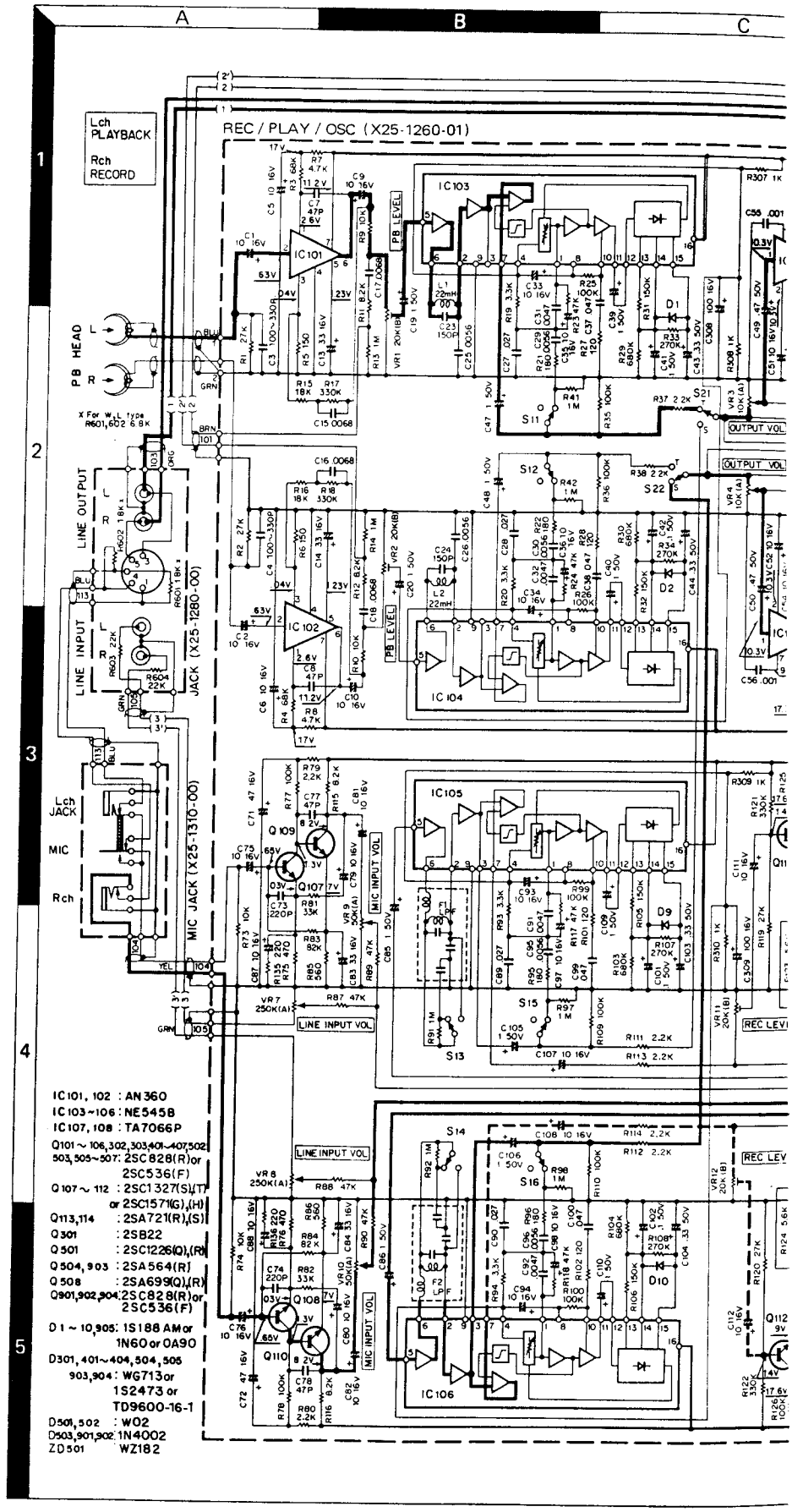
2SA699
2SC1226

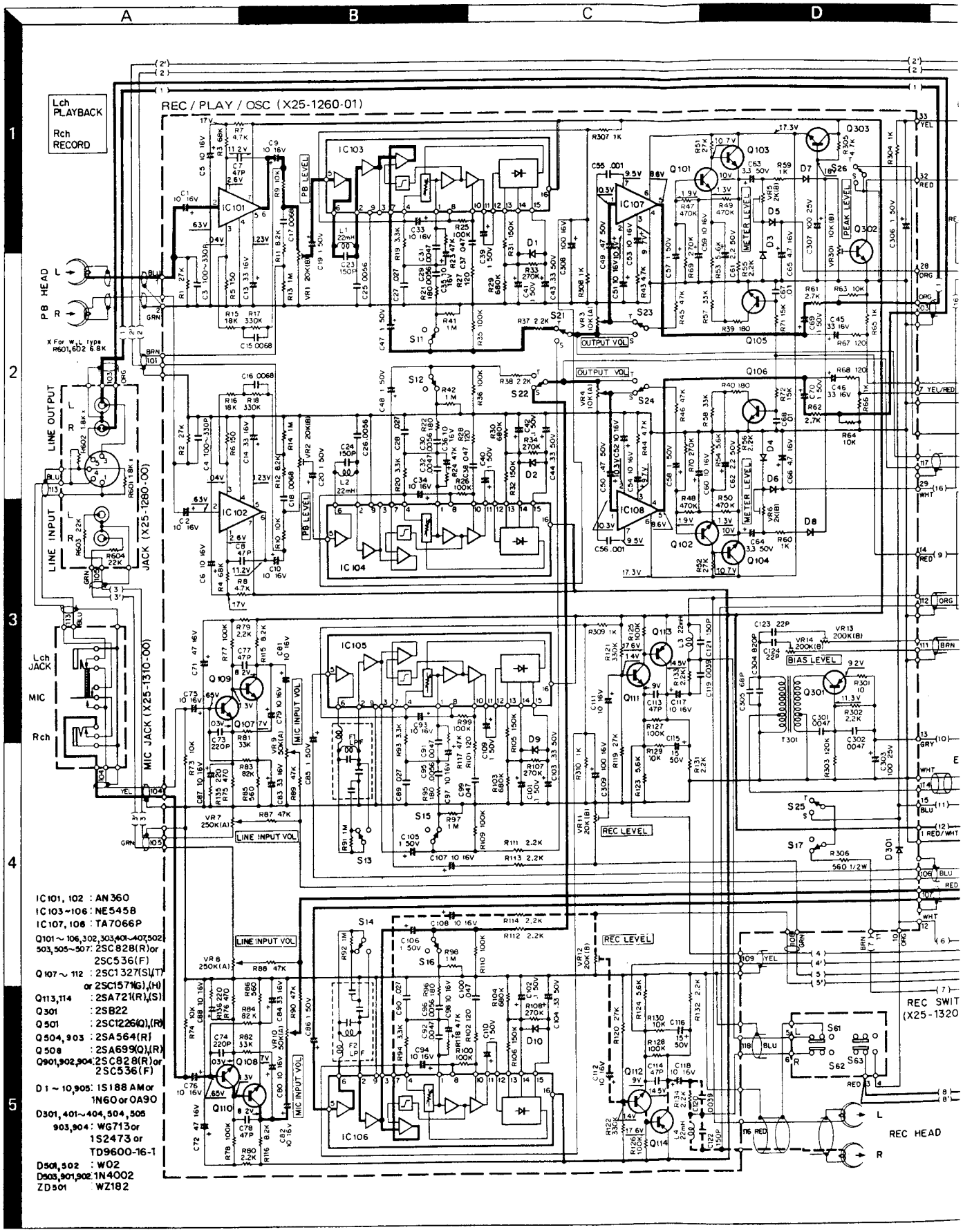


2SB22



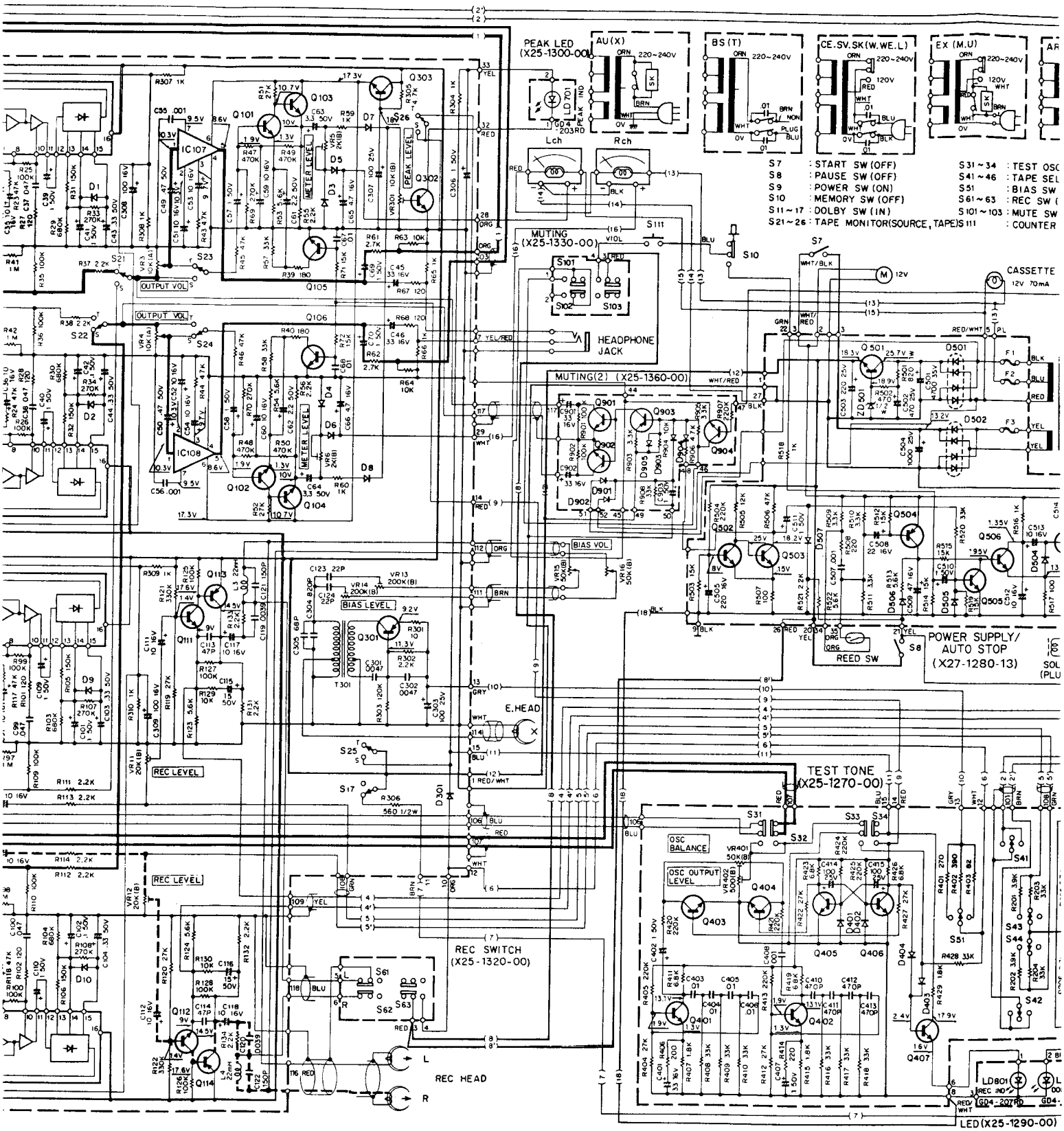
Semiconductor name	Substitutions
2SA564	2SA733
2SA699	2SB595, 2SB596
2SA721	2SA640, 2SA620WB
2SB22	—
2SC828	2SC536, 2SC945
2SC1226	2SC1013
2SC1327	2SC1000
AN360	—
NE5458	—
TA7060P	—



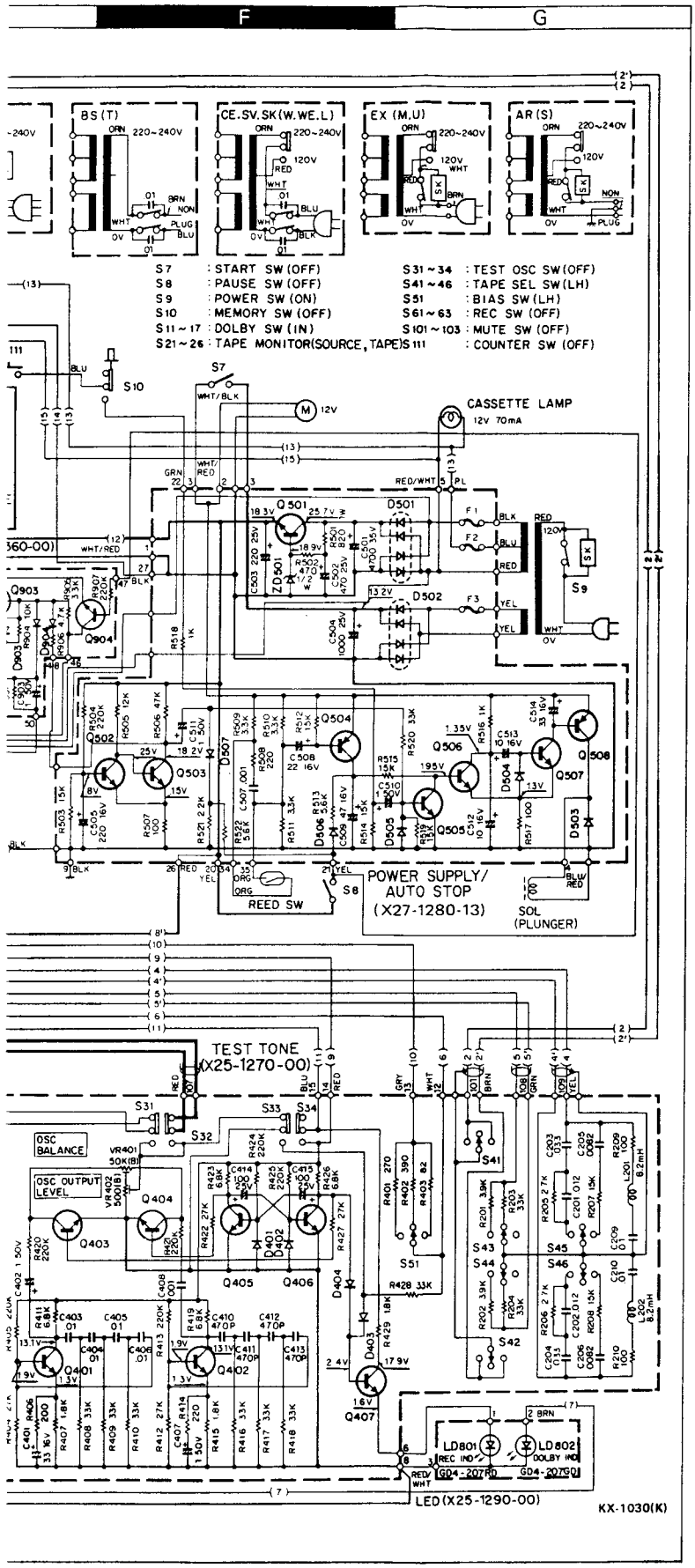

REC / PLAY / OSC (X25-1260-01)
Lch PLAYBACK
Rch RECORD
PB HEAD
LINE OUTPUT JACK (X25-1280-00)
LINE INPUT
MIC JACK (X25-1310-00)
Lch JACK
MIC
Rch
IC101, 102 : AN360
IC103~106 : NE5458
IC107, 108 : TA7066P
Q101 ~ 106, 302, 303, 401~407, 502, 503, 505~507: 2SC828(R) or 2SC536(F)
Q107 ~ 112 : 2SC1327(S),(T) or 2SC1571(G),(H)
Q113, 114 : 2SA721(R),(S)
Q301 : 2SB22
Q501 : 2SC1226(Q),(R)
Q504, 903 : 2SA564(R)
Q508 : 2SA699(Q),(R)
Q901, 902, 904: 2SC828(R) or 2SC536(F)
D1 ~ 10, 905: 1S188 AM or 1N60 or 0A90
D301, 401~404, 504, 505
903, 904 : WG713 or 1S2473 or TD9600-16-1
D501, 502 : W02
D503, 901, 902: 1N4002
ZD501 WZ182
REC SWIT (X25-1320
REC HEAD

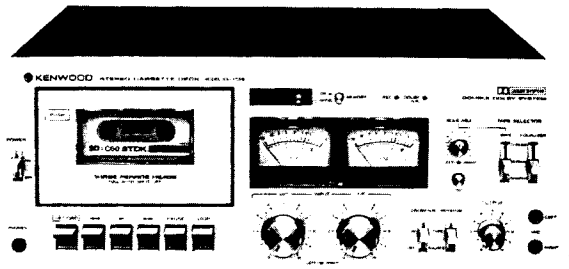
STEREO CASSETTE DECK

C D E F



F G





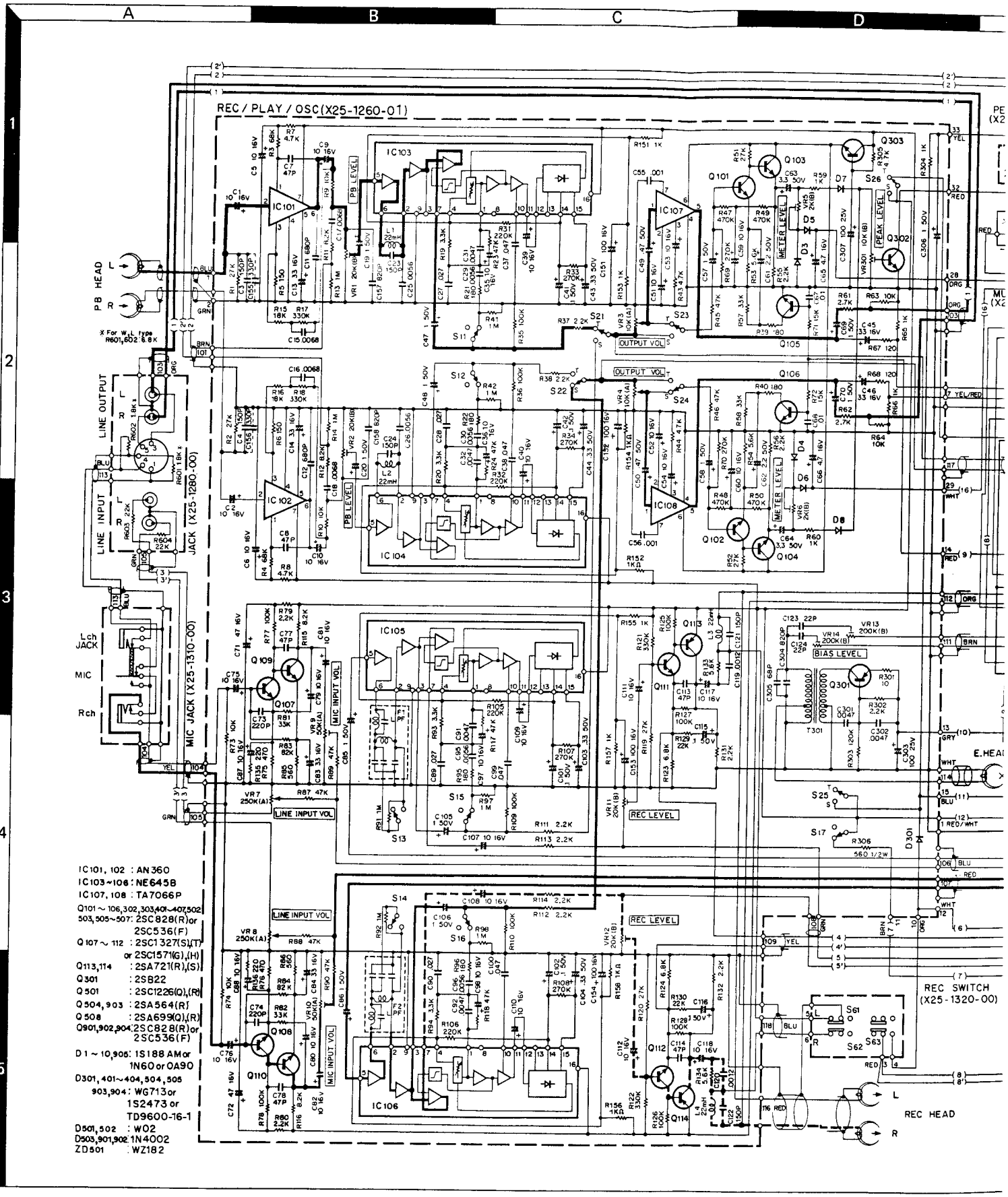
Type	Front Loading Stereo Cassette Deck with Dolby System
Track System	4-Track, 2-Channel Stereo/Mono Recording/Playback
Recording System	AC Bias System (Bias Frequency: 85 kHz)
Erasing System	AC System
Tape Speeds	4.76 cm/sec (1-7/8 ips)
Heads	Three Ferrite Heads Type
	Recording and Playback Combination Head x 1
	Erasing Head x 1
Motor	Electronically-Controlled DC Motor
Fast Winding Time	Approx. 80 seconds with C-60 tape
Frequency Response	Normal Tape: 25 Hz to 17,000 Hz (35 Hz to 15,000 Hz±3 dB)
	CrO_2 Tape: 25 Hz to 20,000 Hz (35 Hz to 18,000 Hz±3 dB)
	Ferri-CrO_2 Tape: 25 Hz to 19,000 Hz (35 Hz to 17,000 Hz±3 dB)
Signal to Noise Ratio	Dolby ON (Over 5 kHz): 65 dB (Normal Tape), 67 dB (CrO_2)
	Dolby OFF: 55 dB (Normal Tape), 57 dB (CrO_2)
Harmonic Distortion	Less than 1.3% (at 1 kHz, 0VU with Normal Tape)
Wow and Flutter	0.06% (WRMS)
Input Sensitivity/Impedance	Line x 2: 77.5 mV/56k ohms
	0.1 mV/1.0k ohms: Europe and Scandinavia model
	DIN x 1: 10.9 mV/1.5k ohms: Other Countries model
	Microphones x 2: 0.19 mV/10k ohms
Output Level/Load Impedance	Line x 2: 775 mV (0VU)/2.0k ohms
	DIN x 1: 775 mV (0VU)/2.0k ohms
	Headphones/1: 48.9 mV/8 ohms to 16 ohms
Build in Features	Three Ferrite Heads Type
	Dolby Noise Reduction System with Indicator
	Three Position Bias Selector (Normal-Chrome-Reserve)
	Three Position Equalization Selector (Normal-Chrome-Reserve)
	Fine Bias Adjustment Controls with Oscillator
15649	Full Auto Shut-Off Mechanism in all Modes
	Mic/Line Mixing
	Memory Rewind
	LED Peak and Recording Indicator
	Tape Monitor
	Three Digit Tape Counter
	Two Large Size Illuminated VU Meters
	Two Microphone Jacks, Headphone Jack
	DIN Rec/P.B. Connector
Power Requirements	AC 120V, 60 Hz: USA and Canada Model
	AC 220V, 50 Hz: Australia Model
	AC 240V, 50 Hz: U.K. Model
	AC 120V/220V (Switchable), 50/60 Hz: Other Countries
Power Consumption	13.0 watts
Dimensions	W: 430 mm/16-15/16"
	H: 167 mm/6-9/16"
	D: 332 mm/13-1/16"
Weight	7.5 kg, 16.5 lbs
Supplied Accessories	Stereo Connection Cord x 2
	Head Cleaning Kit x 1
Reference Tape*	Normal: TDK SD C-90
	Chrome: TDK SA C-60
	Reserve: SONY DUAD C-60

TRIO follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

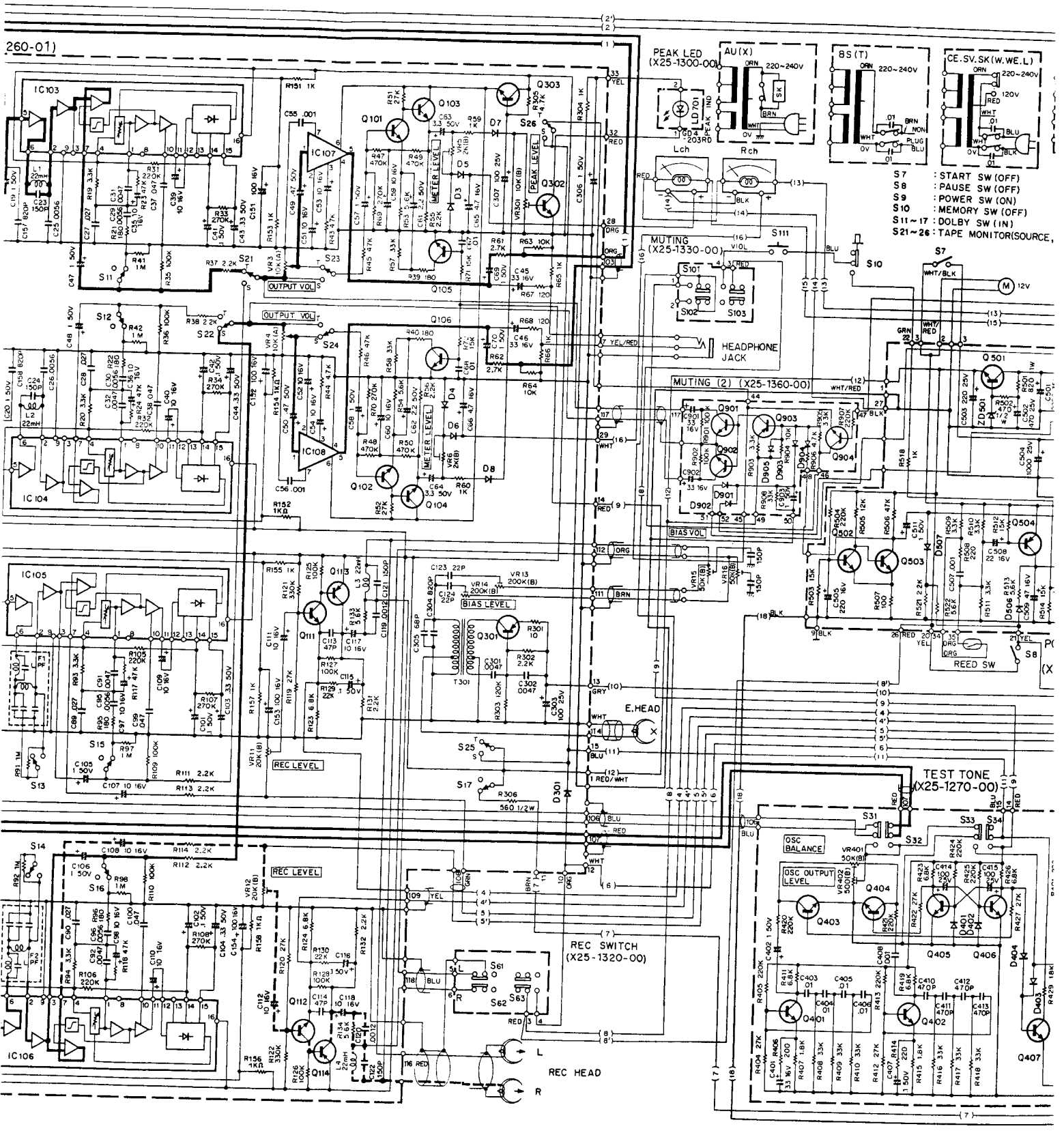
NOTE: *Dolby is trademark of Dolby Laboratories, Inc.

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

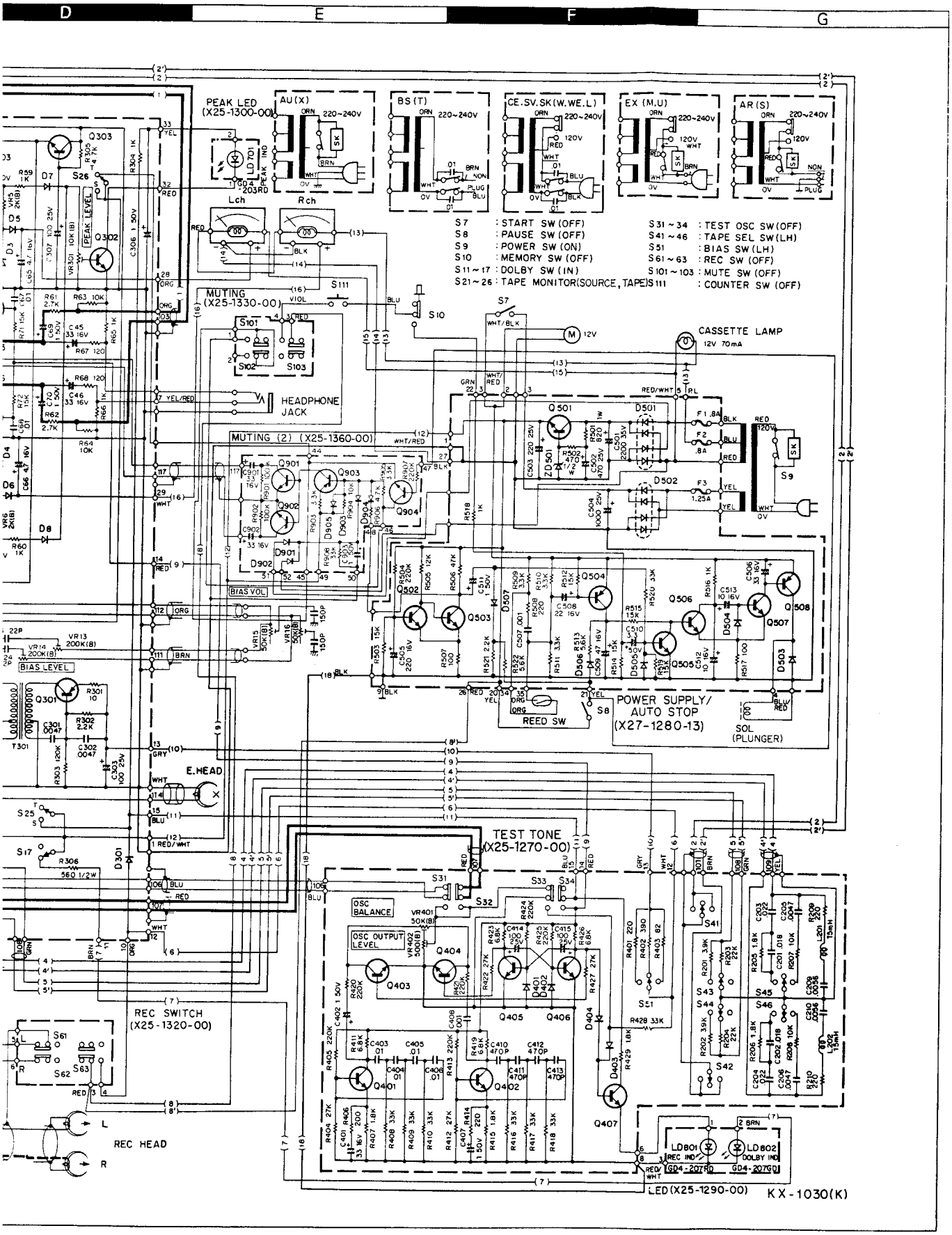
Mean Modifications



NOTE: We reserve the right to make modifications in this model in accordance with technical developments.



ifications in this model in accordance with technical developments.



cal developments.

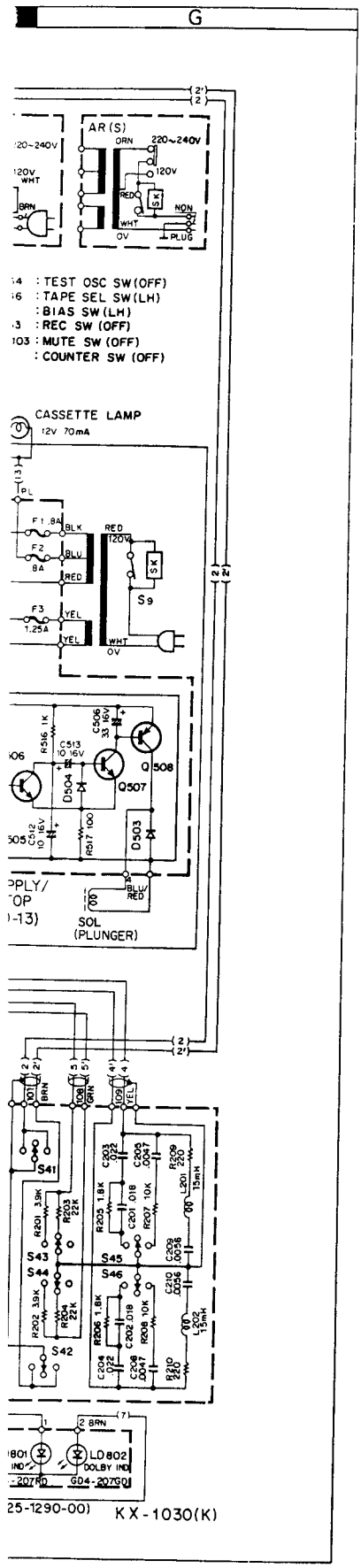
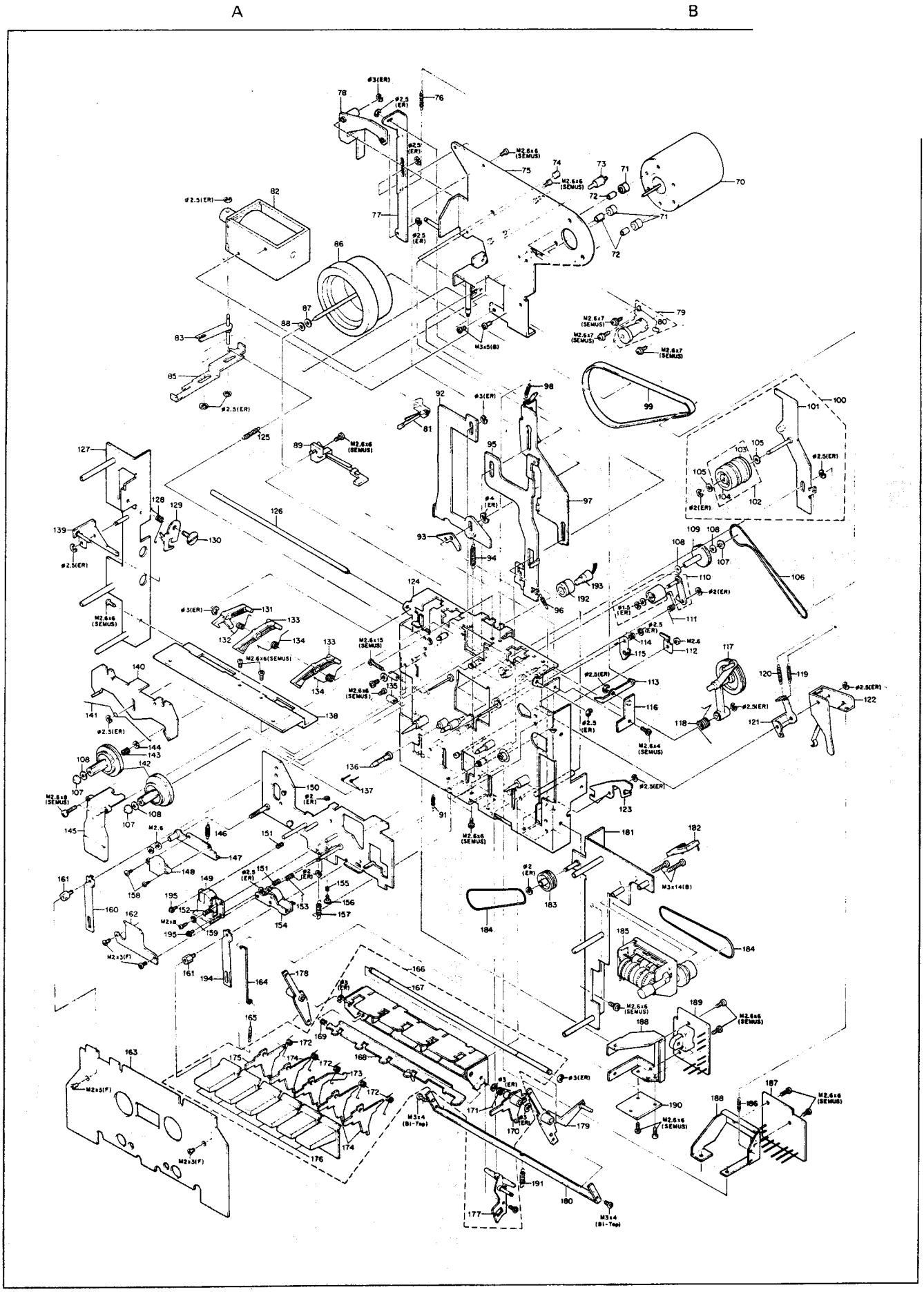

G
AR (S)
220~240V
120V
SK
NON
PLUG
: TEST OSC SW (OFF)
: TAPE SEL SW (LH)
: BIAS SW (LH)
: REC SW (OFF)
: MUTE SW (OFF)
: COUNTER SW (OFF)
CASSETTE LAMP
12V 70mA
F1 8A
F2 8A
F3 1.25A
S9
Q508
Q507
D504
D503
SOL
(PLUNGER)
S41
S42
S43
S44
S45
S46
LD802
DOLBY IND
KX-1030(K)

Fig. No.	Parts No.	Description	Remarks	
106	D16-0207-08	Square belt	☆	8B
107	B09-0008-18	Reel cap		8A
108	N19-0249-08	Polyethylene slider washer φ1.6 × φ6 × 0.25		8A
109	D14-0205-08	Idler ass'y	☆	8B
110	D14-0056-08	Idler "B" ass'y (REW idler)		8B
111	G01-0303-08	Idler "B" lever spring		8B
112	D19-0203-08	Pause slide holding plate		8B
113	D10-0479-08	Lever (2) ass'y for removing pause lock	☆	8B
114	G01-0300-08	Pause lock plate spring		8B
115	D12-0205-08	Pause lock plate	☆	8B
116	D10-0476-08	Plate ass'y for unattended recording operation		8B
117	D10-0496-08	Tension arm ass'y "B"	☆	8B
118	G09-0203-08	Drive roller spring		8B
119	G01-0307-08	REW lever spring "B"		8B
120	G01-0302-08	FR lever spring "D"		8B
121	D10-0201-08	REW lever "B"		8B
122	D10-0480-08	Muting lever ass'y	☆	8B
123	D10-0483-08	FF lever	☆	8B
124	A10-1015-08	Mechanism chassis ass'y	☆	8A
125	G01-0639-08	Eject safty claw	☆	7A
126	D21-0625-08	Cassette helf holding lever shaft	☆	8A
127	J21-2239-08	Mechanism holder "L" ass'y	☆	8A
128	G09-0211-08	Cassette lock plate spring	☆	8A
129	D12-0206-08	Cassette lock plate	☆	8A
130	N09-0582-08	Screw with steps M3 × 5	☆	8A
131	D19-0204-08	REC safety claw	☆	8A
132	G09-0210-08	REC safety claw spring	☆	8A
133	D10-0485-08	Cassette half holding lever	☆	8A
134	G09-0209-08	Cassette half spring	☆	8A
135	J31-0412-08	Faucet for mounting frame	☆	8A
136	J31-0301-08	Felt faucet ass'y	☆	8A
137	N09-0808-08	Flat head screw M1.6 × 4	☆	8A
138	A13-0506-08	Angle for mounting mechanism	☆	8A
139	D10-0482-08	Arm ass'y for preventing eject operation	☆	8A
140	D10-0198-08	Brake lever		8A
141	G03-0011-08	Brake lever spring		8A
142	D03-0007-18	Reel base ass'y	☆	8A
143	G01-0635-18	Back tension spring	☆	8A
144	N19-0515-08	Washer φ6.2 × φ9.5 × 0.15	☆	8A
145	B11-0303-08	Prism plate	☆	9A
146	G09-0208-18	Erase head plate spring	☆	8,9A
147	J21-2237-18	Erase head plate ass'y	☆	9A
148	T32-0004-08	Erase head		9A
149	T34-0005-05	REC/PLAY head	☆	9A
150	A11-0316-08	Head base ass'y	☆	8A
151	G01-0629-08	Adjusting head spring	☆	8A
152	G01-0630-08	Fixing head spring	☆	9A
153	G01-0305-18	Pinch roller spring		9A
154	D10-0467-18	Pinch roller arm ass'y	☆	9A
155	G01-0634-08	Head base shaft spring		9A
156	D39-0043-08	Head base shaft		9A
157	G10-0631-08	Head base spring	☆	9A
158	N09-0205-08	Screw with toothed washer M2 × 5		9A
159	N19-1020-46	Toothed washer		9A
160	G02-0065-08	Head base holding spring		9A
161	N09-0583-08	Hexagonal screw M2.6	☆	9A
162	F01-0608-08	Head protector	☆	9A
163	A29-0301-08	Cassette plate	☆	9A
164	G09-0207-08	REC switch operation wire	☆	9A
165	G01-0672-08	Brake operation lever spring (1)	☆	9A
166	K29-0629-08	Pushbutton block ass'y	☆	9A
167	D21-0623-08	Pushbutton shaft	☆	9A
168	D10-0474-08	Pushbutton operation plate ass'y	☆	9A
169	G01-0645-08	Pushbutton operation plate spring	☆	9A
170	D10-0473-08	STOP pushbutton lever ass'y	☆	9B
171	G09-0206-08	STOP pushbutton spring	☆	9B
172	G09-0205-08	Pushbutton spring	☆	9A
173	D10-0470-08	Pushbutton lever "A"	☆	9A
174	D10-0471-08	Pushbutton lever "B"	☆	9A
175	D10-0472-08	REC pushbutton lever	☆	9A
176	K29-0630-08	Operational pushbutton	☆	9A
177	D10-0475-08	Eject lever holder ass'y	☆	9B
178	D10-0481-18	Housing arm ass'y "L"	☆	9A
179	D10-0497-18	Housing arm ass'y "R"	☆	9B
180	D10-0486-08	Housing arm interlock plate	☆	9B
181	J21-2238-08	Mechanism holder "R" ass'y	☆	8B
182	S59-1043-08	Reed switch		8B
183	D14-0206-08	Counter idler	☆	9B
184	D16-0208-08	Counter belt	☆	9B
185	B35-0203-08	Tape counter	☆	9B
186	G01-0636-08	Muting lever spring	☆	9B
187	X25-1330-00	MUTING SWITCH PC board ass'y	☆	9B
188	A15-0303-08	Frame for switch		9B
189	X25-1320-00	REC SWITCH PC board ass'y	☆	9B
190	J21-2262-08	Wire holder	☆	9B
191	G01-0637-08	Housing arm spring	☆	9B
192	F14-0106-08	Lamp tube		8B
193	B30-0507-08	Pilot lamp 12V 60 mA	☆	8B
194	G02-0311-08	Head base holding screw "B"		9A
195	N09-0813-08	Screw with toothed washer		9A

Fig. No.	Parts No.
M2 × 8	N30-2008-46
M3 × 8	N30-3008-46
M3 × 4 (Bi-Tap)	N89-3004-46
M3 × 6 (Bi-Tap)	N89-3006-46
M2.6 × 4 (SEMUS)	N09-0199-08
M2.6 × 6 (SEMUS)	N09-0202-08
M2.6 × 7 (SEMUS)	N09-0200-08
M2.6 × 8 (SEMUS)	N09-0203-08
M2.6 × 15 (SEMUS)	N09-0201-08
M2 × 3 (F)	N32-2003-46
M3 × 5 (B)	N35-3005-46
M3 × 14 (B)	N35-3014-46
M2.6	N10-2026-46
M3	N10-2030-46
φ1.5 (ER)	N24-3015-60
φ2 (ER)	N24-3020-60
φ2.5 (ER)	N24-3025-60
φ3 (ER)	N24-3030-60
φ4 (ER)	N24-3040-60



RX-1000

● : Refer to Destinations' Parts List
☆ : New parts

Fig. No.	Parts No.	Description	Remarks
1	A01-0603-08	Case	☆ 1B
2	B42-1334-08	Adjustment sheet	☆ 1B
3	N09-0233-08	Binding head tap tight screw M4×8	1A,B
4	A23-1207-08	Rear panel	☆ 2B
5	●	Power cord	1B
6	●	Power cord bushing	2B
7	●	Power cord clamp holder A	☆ 2B
8	●	Slide switch	2B
9	●	Switch stopper holder	2B
10	N08-0128-25	GND terminal	2B
11	●	JACK PC board ass'y	☆ 2B
12	●	Panel ass'y (includes the parts of 13,14,15,16,18 and 19)	☆ 3A
13	B10-0501-08	Meter front glass	☆ 2A
14	B07-0511-08	Escutcheon for mechanism chassis ass'y	☆ 2A
15	B07-0510-08	Escutcheon for tape counter	☆ 3A
16a	B07-0508-08	Switch sleeve A	☆ 2A
16b	B07-0509-08	Switch sleeve B	☆ 3A
17	N29-0202-08	Nylon rivet ϕ3.5 × 5.5	2B
18	B07-0205-04	Escutcheon (small)	☆ 3A
19	B07-0206-04	Escutcheon (big)	☆ 3A
20	K23-0614-08	Knob (lever switch, outside)	☆ 3A
21	K23-0606-08	Knob (lever switch, inside)	☆ 3A
22	K23-0618-08	Knob (BIAS VR, outisde)	☆ 3A
23	K23-0616-08	Knob (BIAS VR, inside)	☆ 3A
24	K23-0620-08	Knob (OUTPUT VR, outside)	☆ 3A
25	K23-0608-08	Knob (OUTPUT VR, inside)	☆ 3A
26	K27-0051-04	Knob (lever switch)	☆ 3A
27	A40-0518-08	Bottom plate	☆ 3A
28	J02-0308-08	Leg	3B
29	N09-0571-08	Binding head tap tight screw	3B
30	●	Cassette lid	☆ 3A
31	—	—	—
32	F31-0403-08	Power transformer holder	4A
33	●	Power transformer	☆ 4A
34	F20-0404-08	Insulation plate	☆ 4A
35	●	POWER SUPPLY/AUTO STOP PC board ass'y	☆ 4B
36	F10-1009-08	Shielding plate for power transformer	☆ 4A
37	J42-0308-08	Bushing	4B
38	J21-2243-08	Top plate	☆ 5B
39	J19-0468-08	Lead holder	5B
40	J21-2241-08	Side plate	☆ 5A,5B
41	F20-0403-08	Shielding plate for motor	☆ 5B
42	J21-2242-08	Middle plate	☆ 5B
43	—	—	
44	F20-0402-08	Insulating sheet for power switch	☆ 5B
45	B31-0501-05	VU meter	☆ 5A
46	J21-2244-08	VU meter holder	☆ 5A
47	X25-1300-00	PEAK LED PC board ass'y	☆ 5A
48	X25-1270-00	TEST TONE PC board ass'y	☆ 6B
49	●	Power switch	☆ 5A
50	E11-0304-08	Headphone jack	6A
51	S40-2304-08	Pushbutton switch for memory rewind operation	☆ 6A
52	X25-1290-00	LED PC board ass'y	☆ 6A
53	R21-4302-08	Variable resistor 50kΩ(B) × 2 VR15, 16	☆ 6A
54	X25-1310-00	MIC JACK PC board ass'y	☆ 6B
55	X25-1260-01	REC/PLAY/OSC PC board ass'y	☆ 6B
56	K23-0612-08	Knob (OSC)	☆ 6A
57	K23-0610-08	Knob (MEMORY REWIND)	☆ 6A
58	J21-2240-08	Back plate	☆ 6A
59	—	—	
60	A21-0646-08	VU meter dress board	☆ 6A
61	X25-1360-00	MUTING (2) PC board ass'y	☆ 2A
62	—	—	—
63	—	—	—
64	—	—	—
65	—	—	—
66	—	—	—
67	—	—	—
68	—	—	—
69	—	—	—
70	T42-0104-08	Motor	7B
71	G13-0415-08	Rubber for motor	☆ 7B
72	J31-0128-08	Faucet for motor	7B
73	D21-0624-08	Stopping shaft	☆ 7B
74	N09-0208-18	Flywheel thrust adjusting screw	☆ 7B
75	J19-1224-08	Flywheel holder ass'y	☆ 7B
76	G01-0638-08	Spring for returning	☆ 7A
77	D10-0521-08	Link lever for removing pause lock	☆ 7A
78	D10-0477-08	Lever (1) ass'y for removing pause lock	☆ 7A
79	D15-0503-08	Motor pulley ass'y	☆ 7B
80	N70-2003-16	Set screw	7B
81	S46-1302-08	Leaf switch (PAUSE)	7A
82	T94-0055-08	Plunger	☆ 7A
83	D10-0478-08	Shut-off lever (2) ass'y	☆ 7A
84	—	—	
85	D10-0484-08	Shut-off lever (1)	☆ 7A
86	D01-0303-08	Flywheel ass'y	☆ 7A
87	N19-0234-08	Washer ϕ2.5 × 0.25	7A
88	N19-0504-08	Polyethylene slider washer ϕ5 × ϕ2.5 × 0.25	7A
89	S46-1304-08	Leaf switch for motor	7A
90	—	—	
91	G01-0294-08	Record prevention spring	☆ 8A
92	D10-0197-08	Brake operation lever	7A
93	D10-0199-08	Lock defeat plate	8A
94	G01-0632-08	Brake operation lever spring	☆ 8B
95	D10-0469-18	Pause operation lever ass'y	☆ 8B
96	G01-0633-08	Pause operation lever spring	☆ 8B
97	D10-0195-18	FF interlock lever ass'y	8B
98	G01-0297-08	FF interlock lever spring	7B
99	D16-0206-08	Flat belt	☆ 7B
100	D10-0468-08	FR lever block ass'y	☆ 7B
101	D10-0193-08	FR lever ass'y	7A
102	D14-0204-08	Idler "A" ass'y (FW idler)	☆ 8B
103	D14-0055-08	Idler "A1" ass'y	8B
104	D14-0203-08	Idler "A2" ass'y	8B
105	N19-0529-08	Washer ϕ2.5 × 0.1	8B